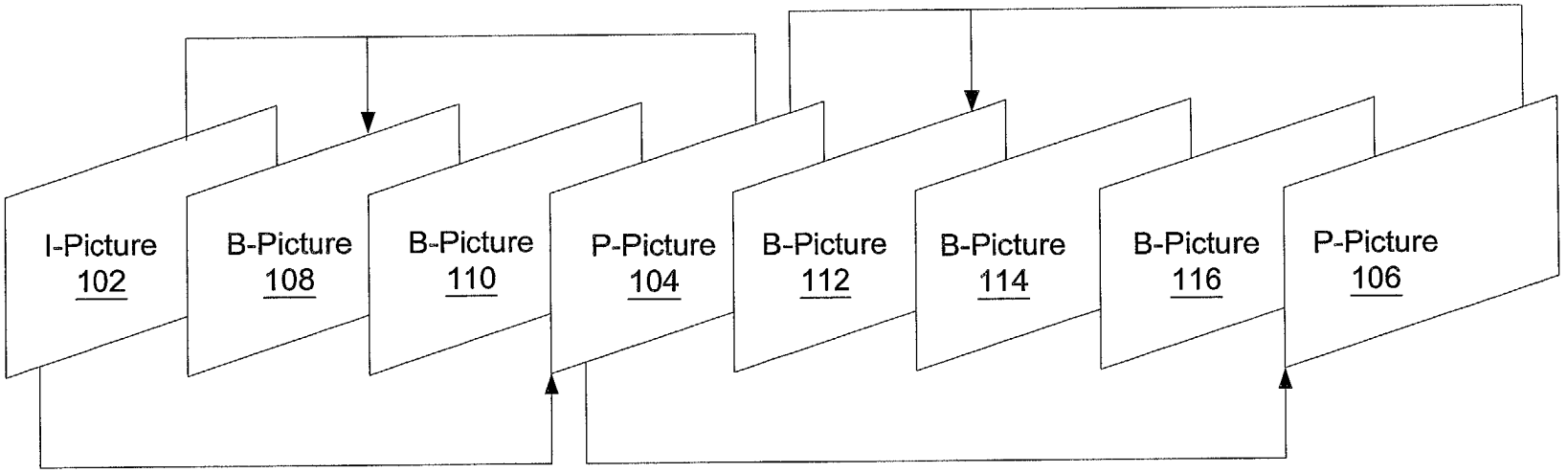

I-Picture
102
B-Picture
108
B-Picture
110
P-Picture
104
B-Picture
112
B-Picture
114
B-Picture
116
P-Picture
106

FIG. 1

T06020 9E6T0660

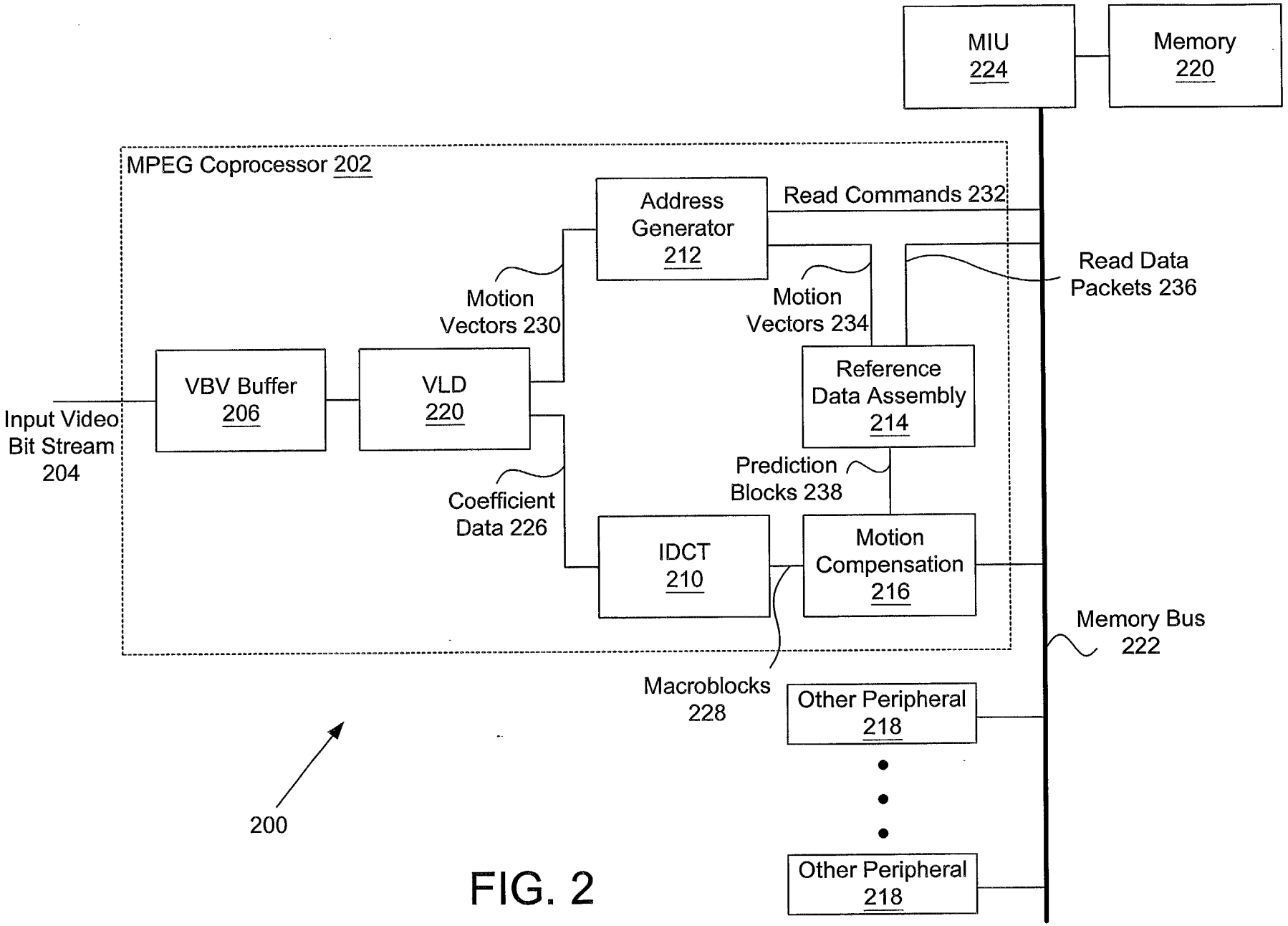


FIG. 2

T06020 96T0660

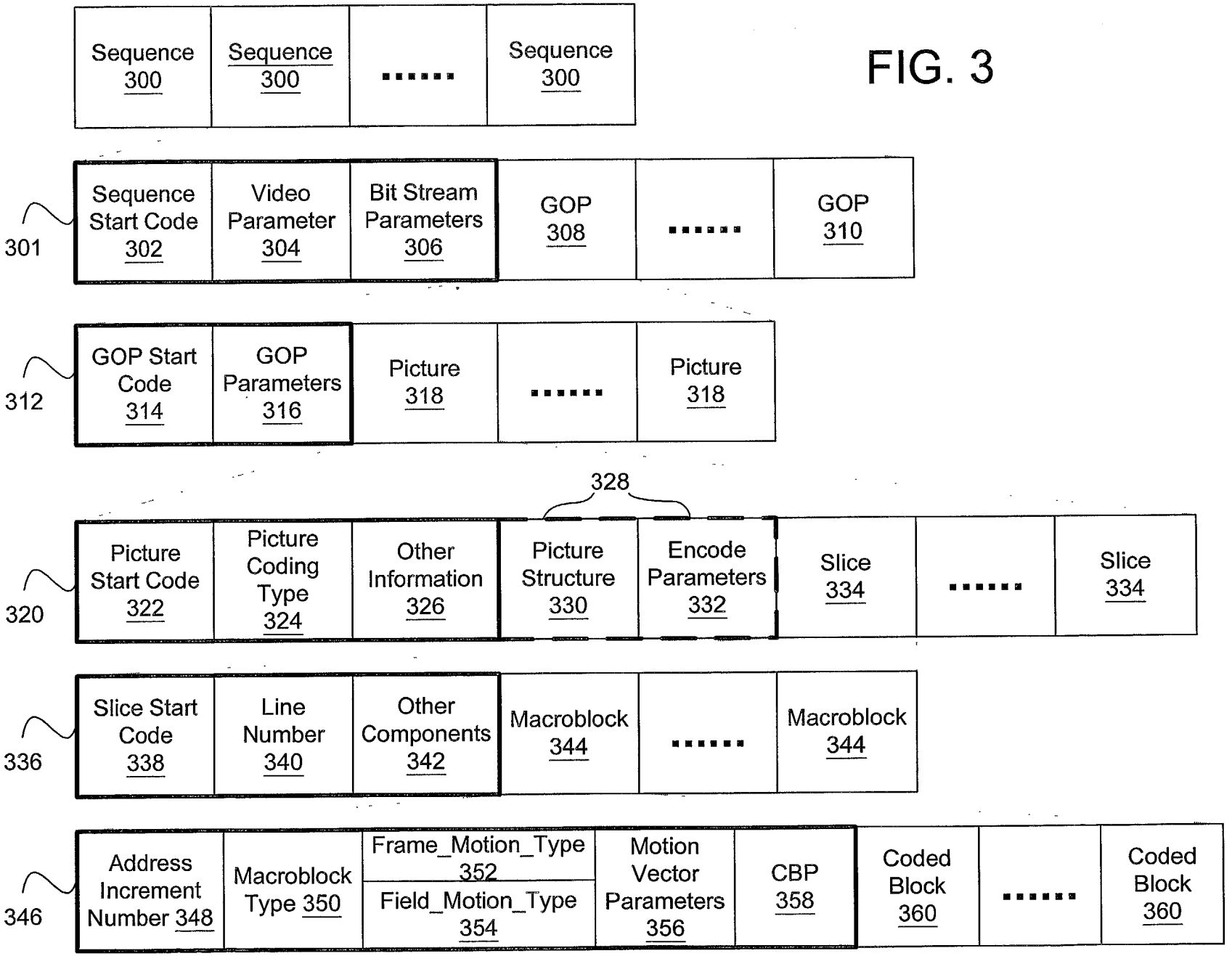


FIG. 3

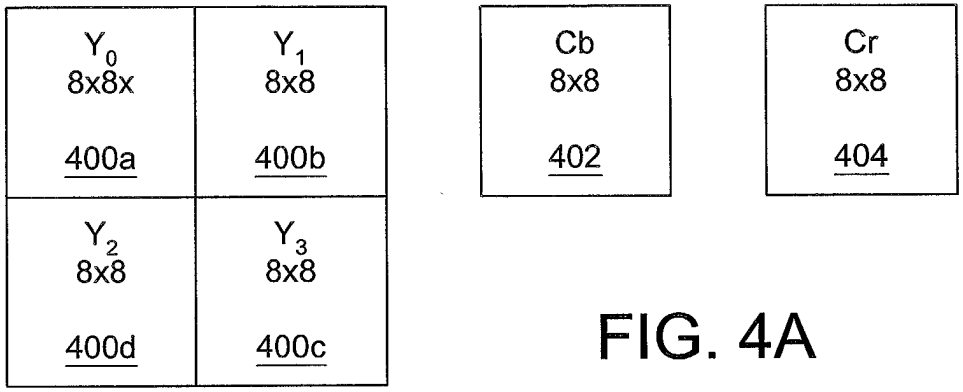

Y_0
8x8x
400a
Y_1
8x8
400b
Y_2
8x8
400d
Y_3
8x8
400c
Cb
8x8
402
Cr
8x8
404

FIG. 4A

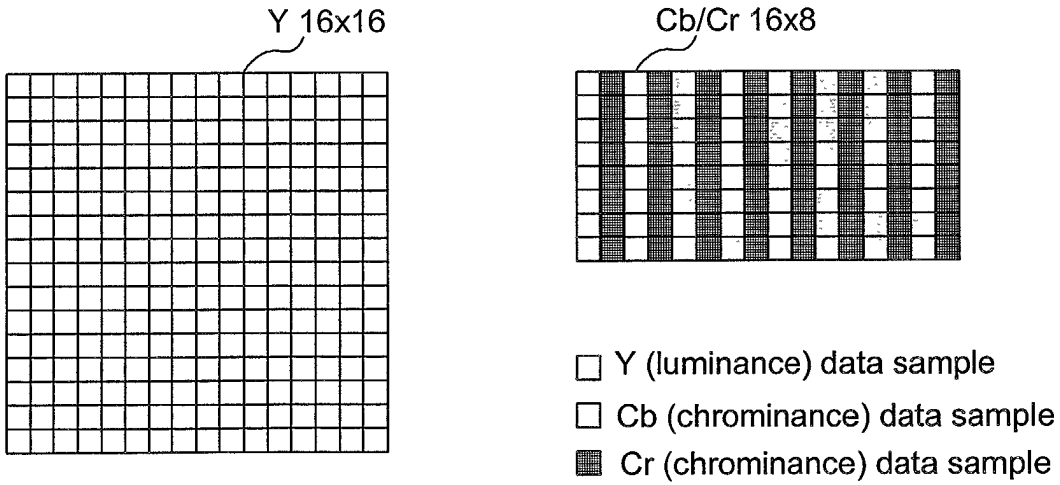

Y 16x16
Cb/Cr 16x8
Y (luminance) data sample
Cb (chrominance) data sample
Cr (chrominance) data sample

FIG. 4B

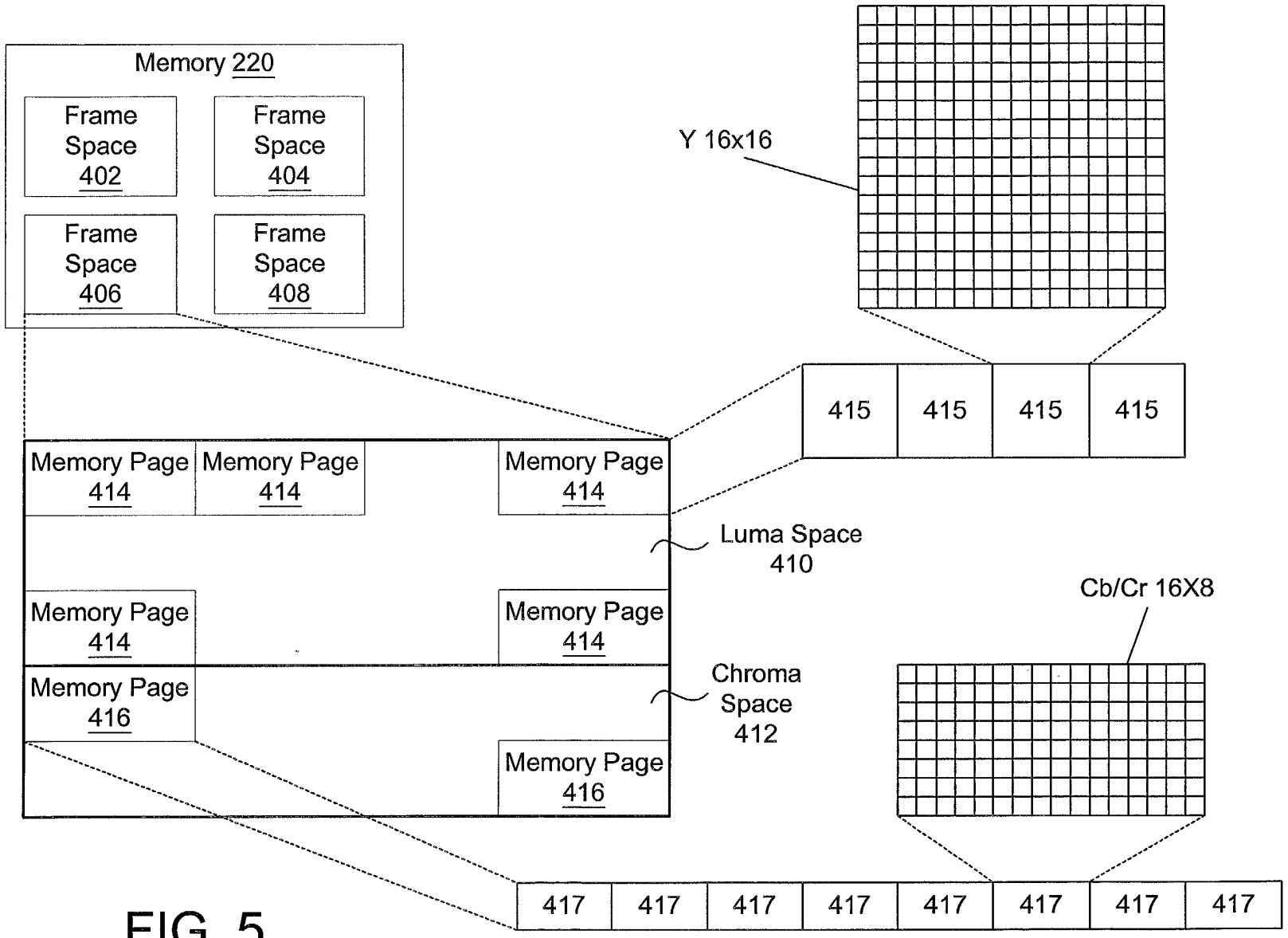

Memory 220
Frame Space 402
Frame Space 404
Frame Space 406
Frame Space 408
Y 16x16
415
415
415
415
Memory Page 414
Memory Page 414
Memory Page 414
Luma Space 410
Memory Page 414
Memory Page 414
Memory Page 416
Chroma Space 412
Cb/Cr 16X8
Memory Page 416
417
417
417
417
417
417
417
417

FIG. 5

T06020" 9E6T0660

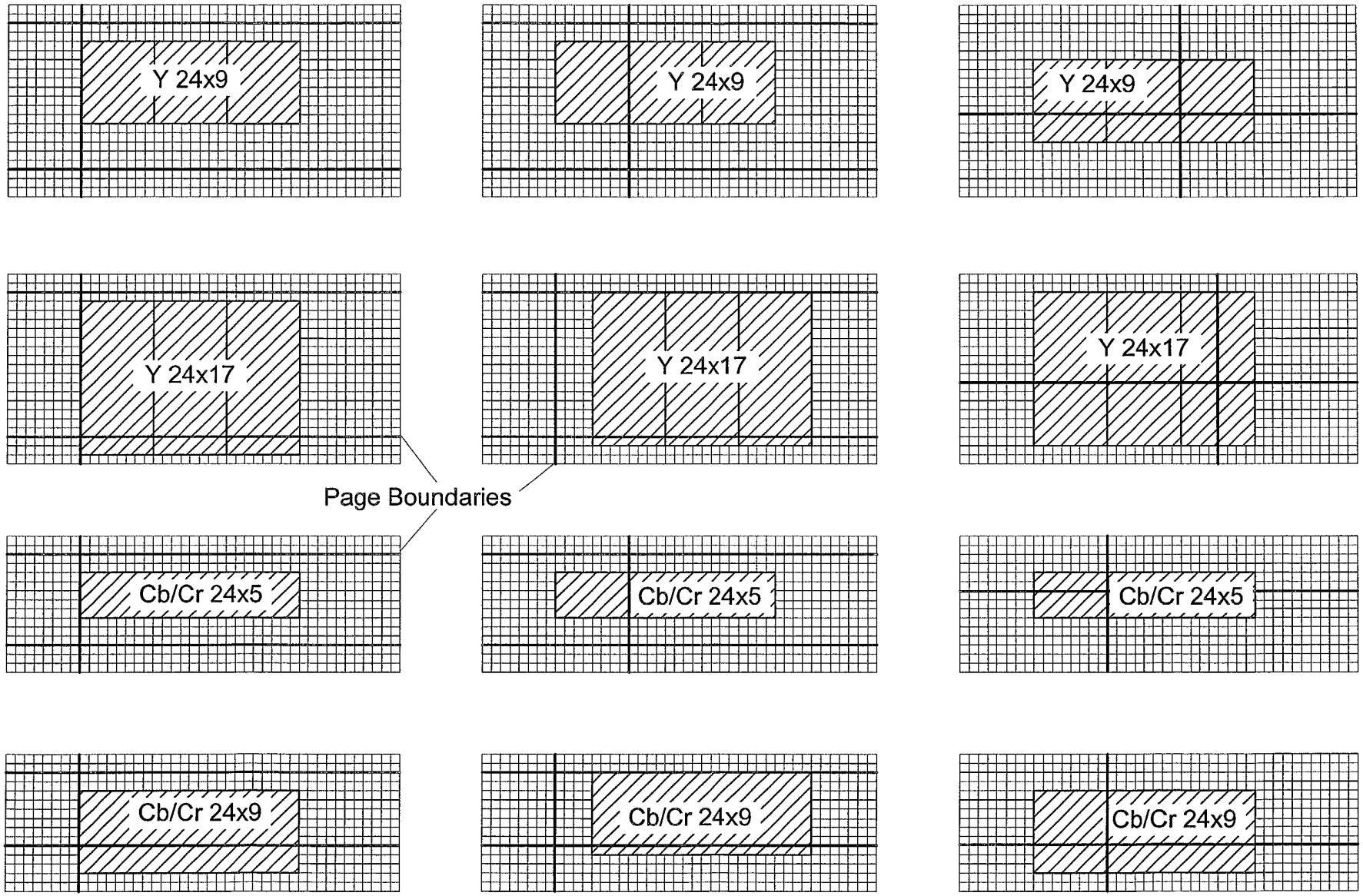
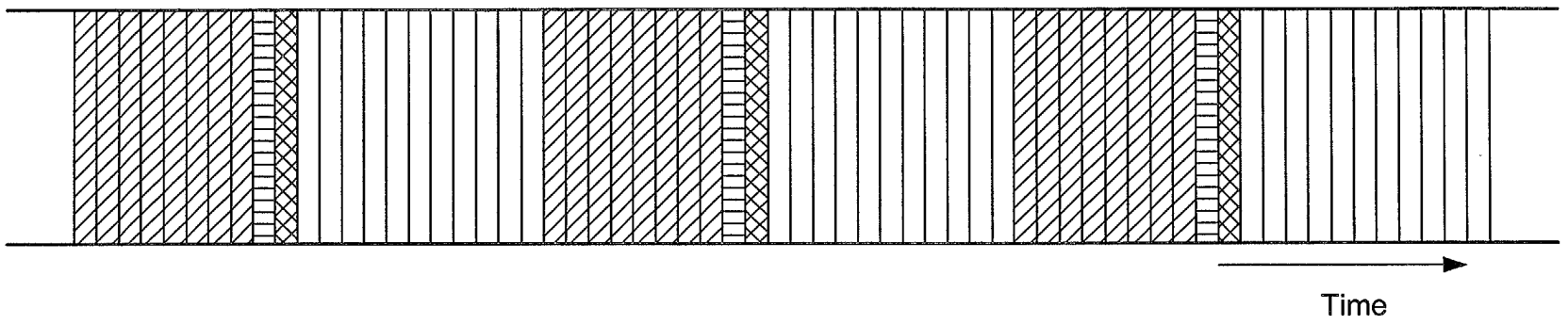


FIG. 6


Time

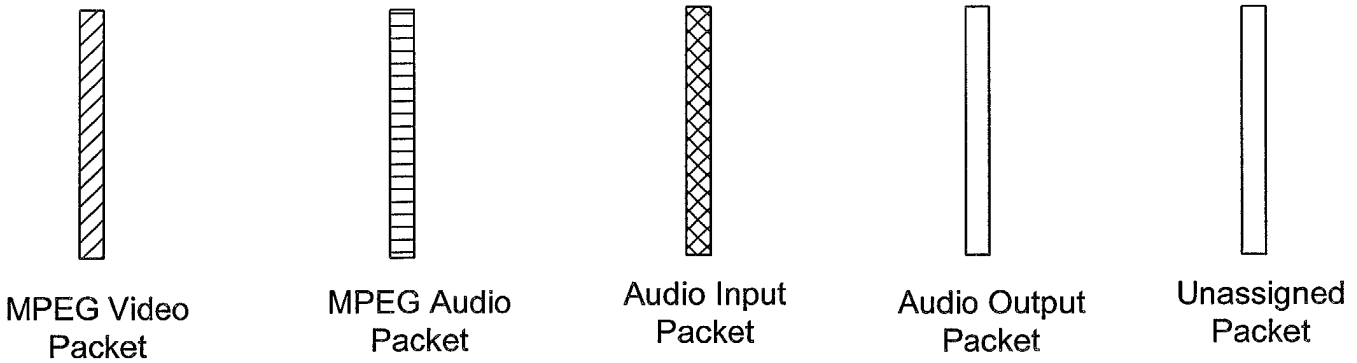

MPEG Video Packet
MPEG Audio Packet
Audio Input Packet
Audio Output Packet
Unassigned Packet

FIG. 7

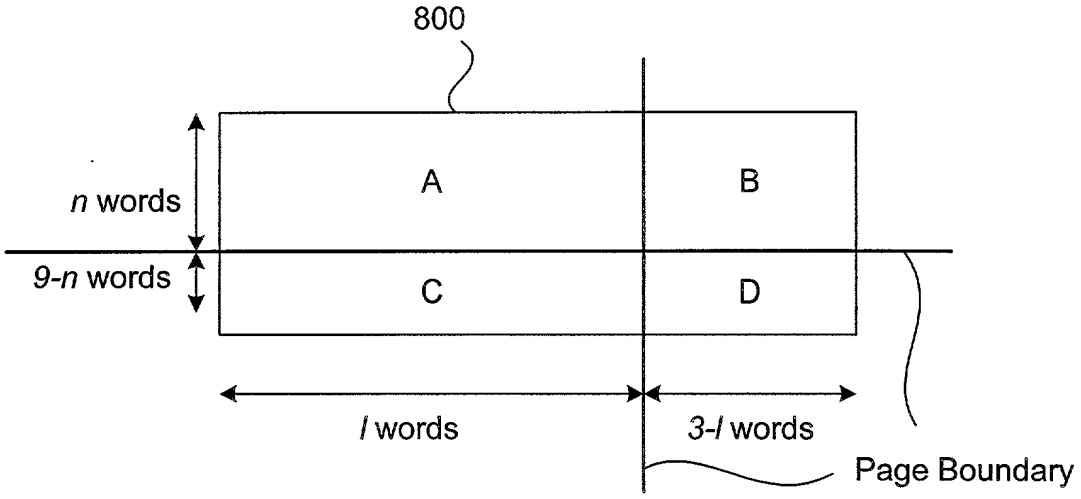

800
A
B
C
D
n words
9-n words
l words
3-l words
Page Boundary

FIG. 8a

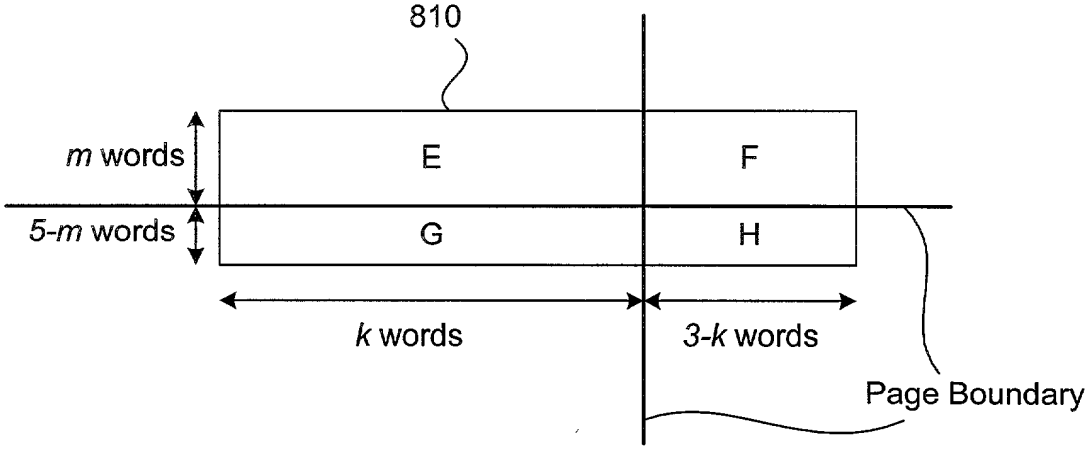

810
E
F
G
H
m words
5-m words
k words
3-k words
Page Boundary

FIG. 8b

T06020 9E6T0660

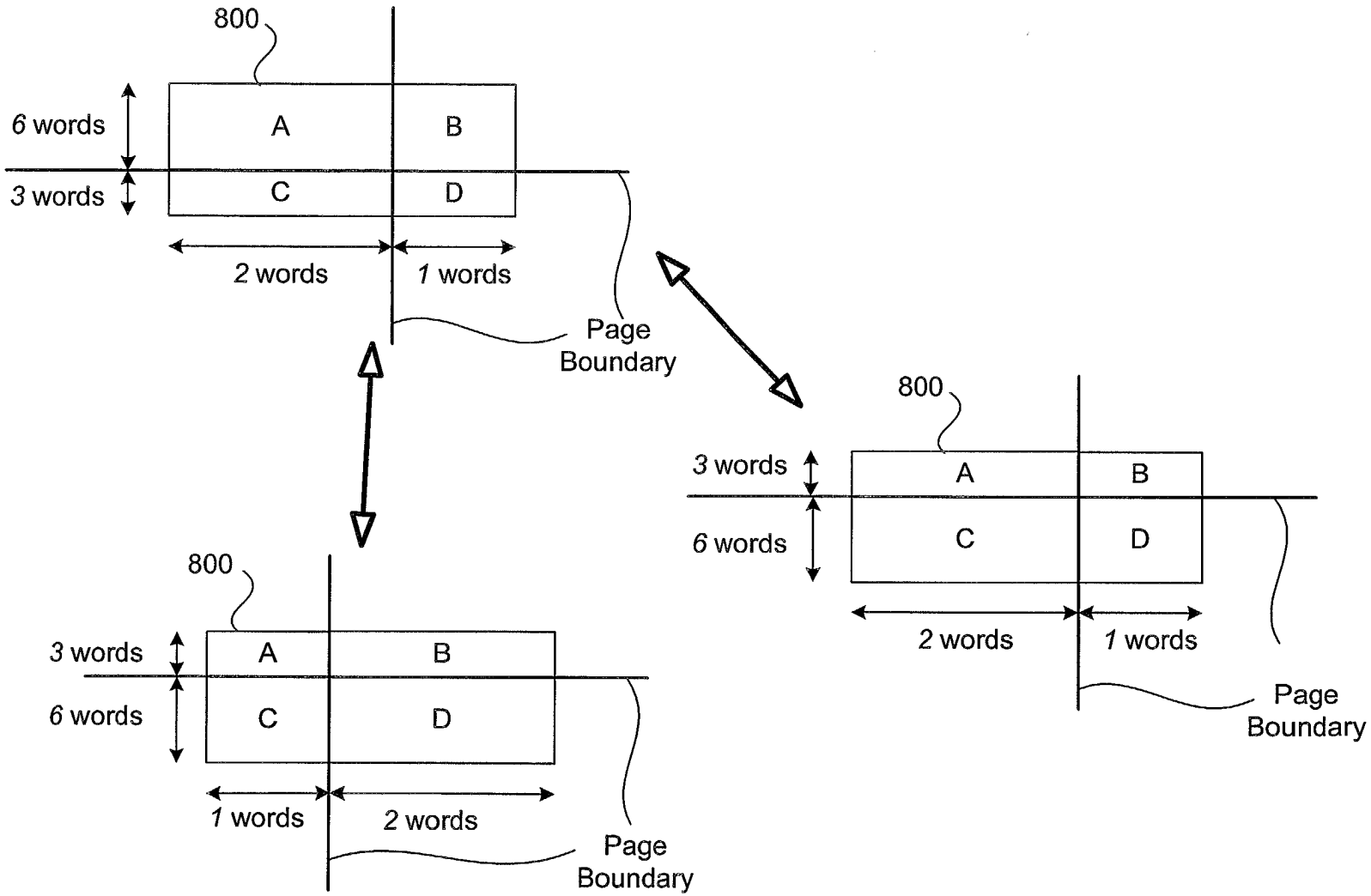


FIG. 8c

T06020 9E6T0660

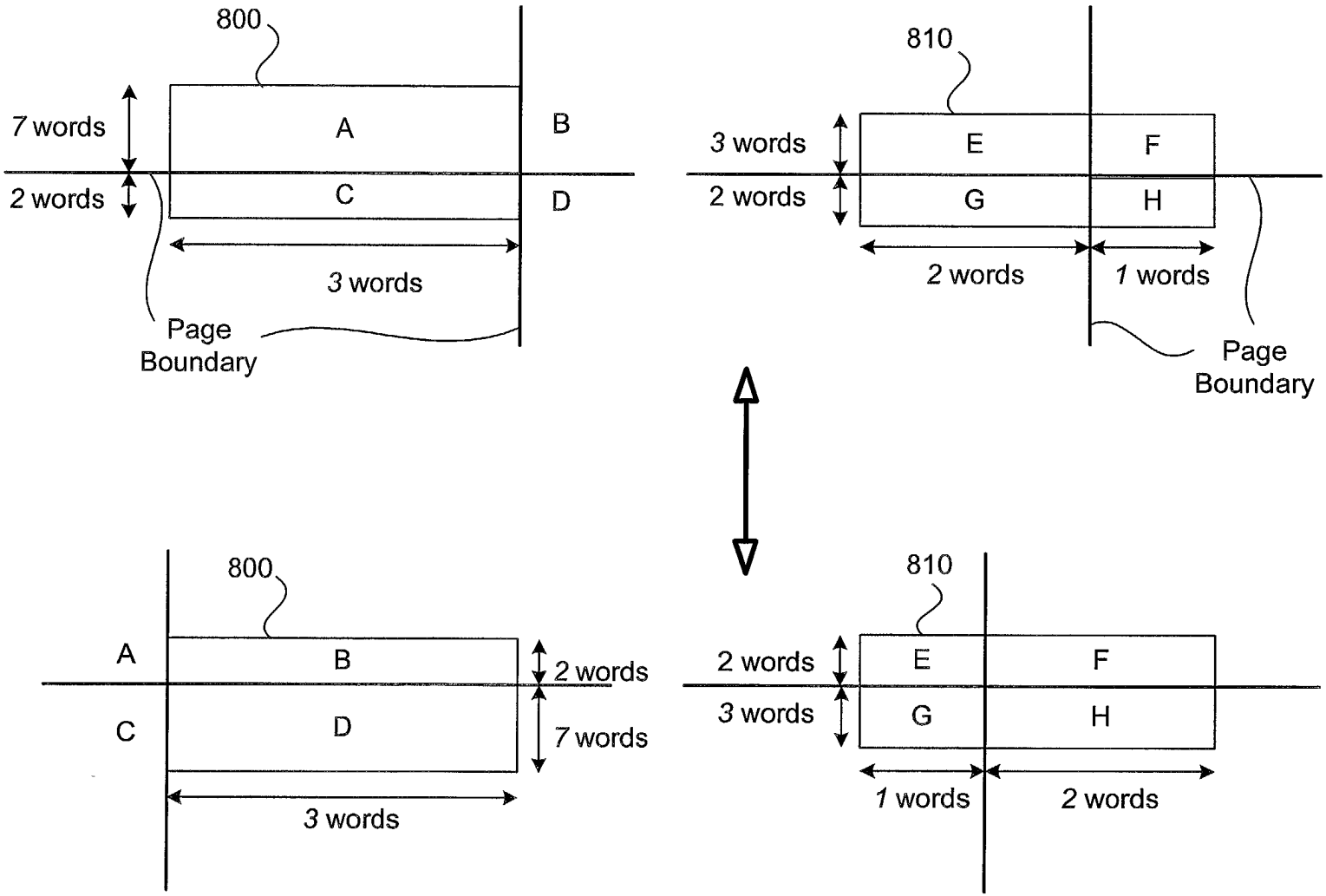


FIG. 8d

Page 96 of 96 - 9/6/2006

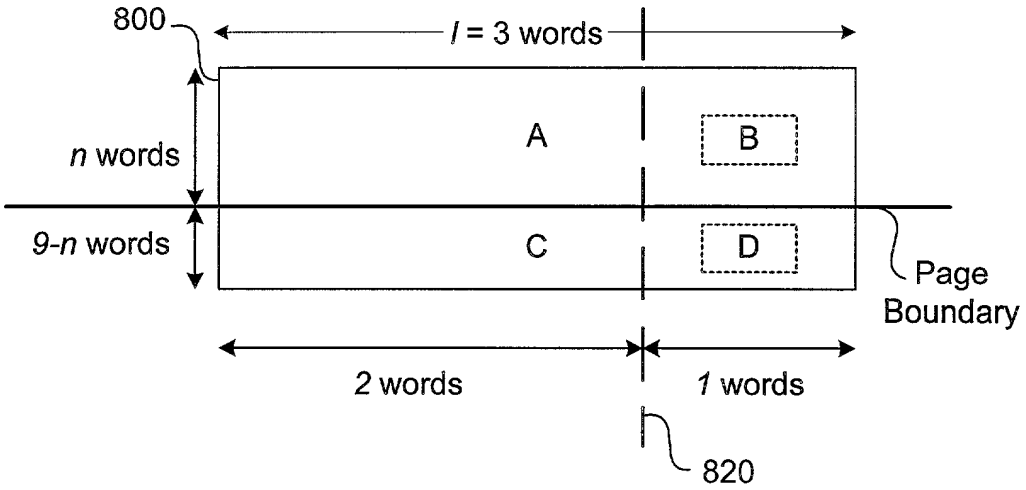


FIG. 8e

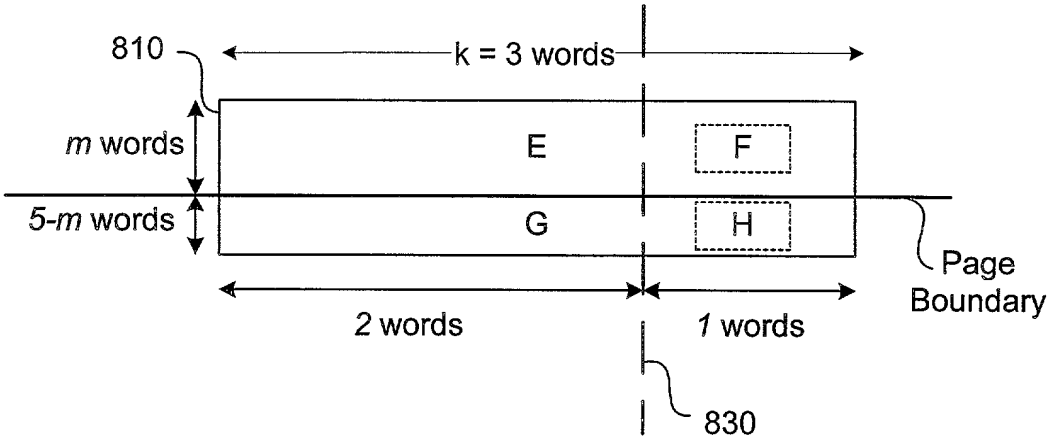


FIG. 8f

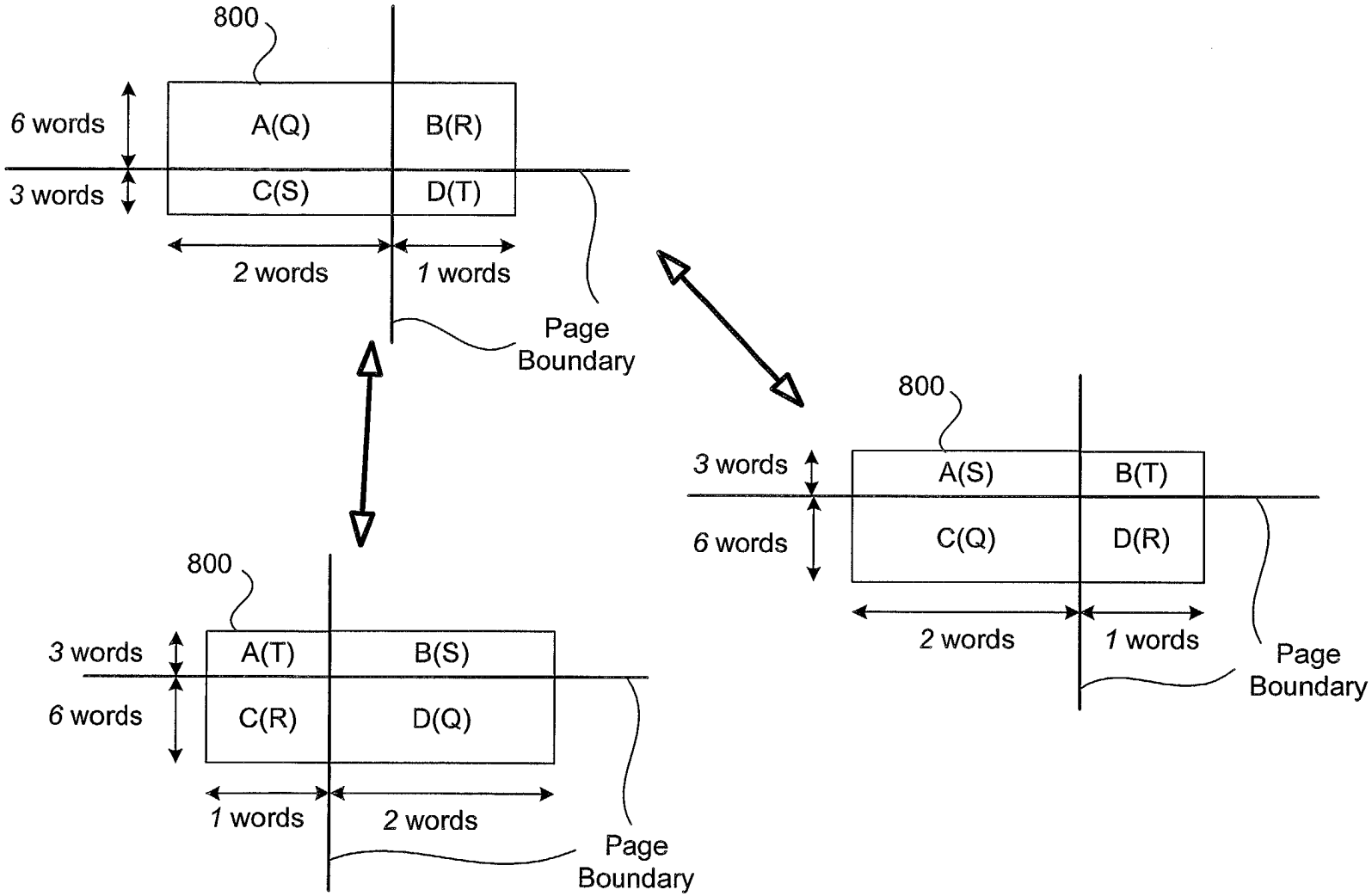
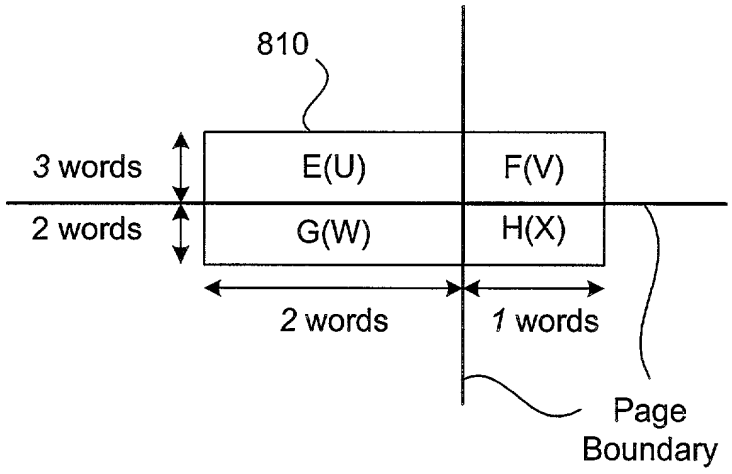

800
6 words
3 words
A(Q)
B(R)
C(S)
D(T)
2 words
1 words
Page Boundary
800
3 words
6 words
A(S)
B(T)
C(Q)
D(R)
2 words
1 words
Page Boundary
800
3 words
6 words
A(T)
B(S)
C(R)
D(Q)
1 words
2 words
Page Boundary

FIG. 8g


810
3 words
2 words
E(U)
F(V)
G(W)
H(X)
2 words
1 words
Page
Boundary

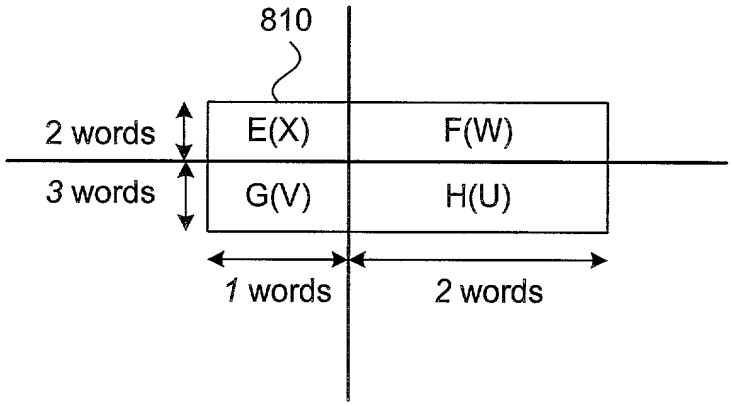

810
2 words
3 words
E(X)
F(W)
G(V)
H(U)
1 words
2 words

FIG. 8h

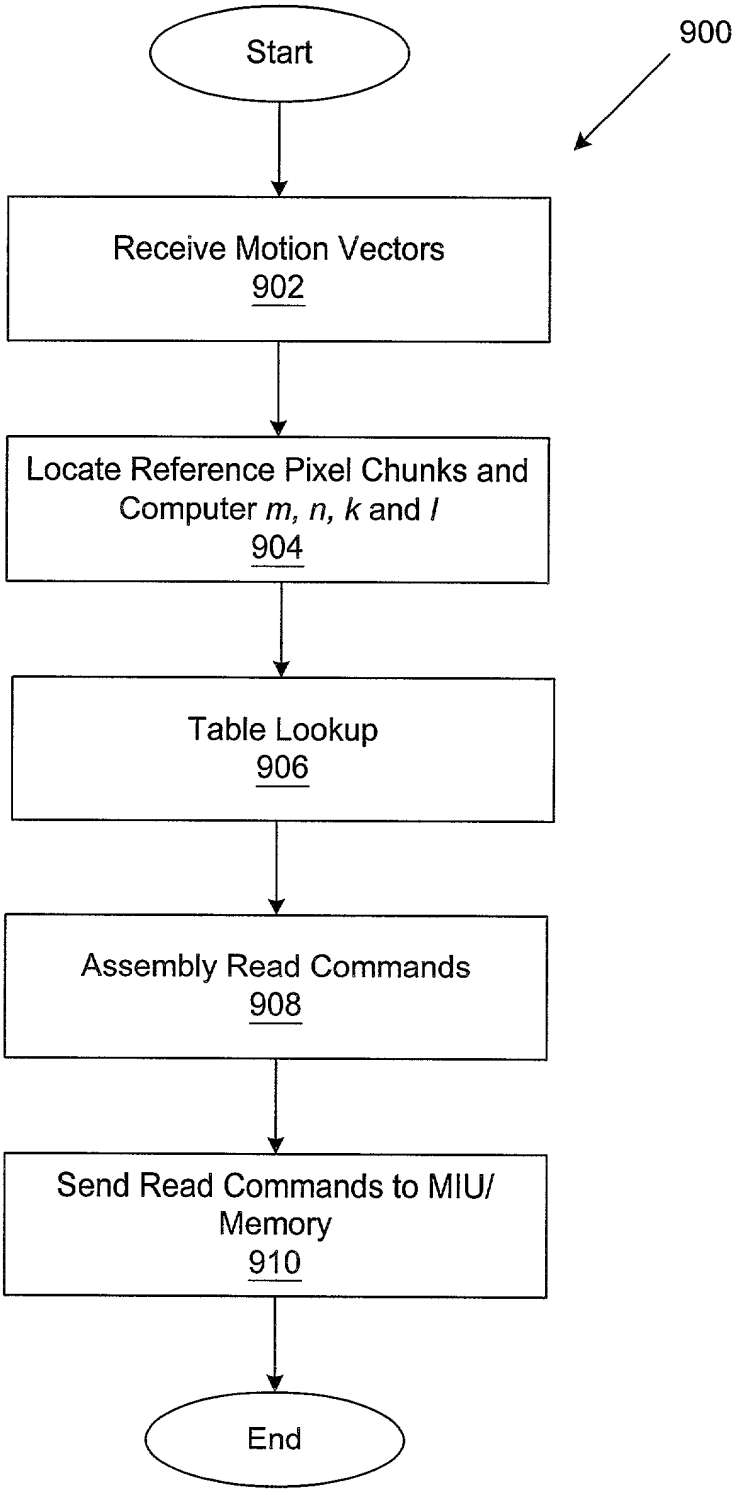

900
Start
Receive Motion Vectors
902
Locate Reference Pixel Chunks and Computer m, n, k and l
904
Table Lookup
906
Assembly Read Commands
908
Send Read Commands to MIU/ Memory
910
End

FIG. 9

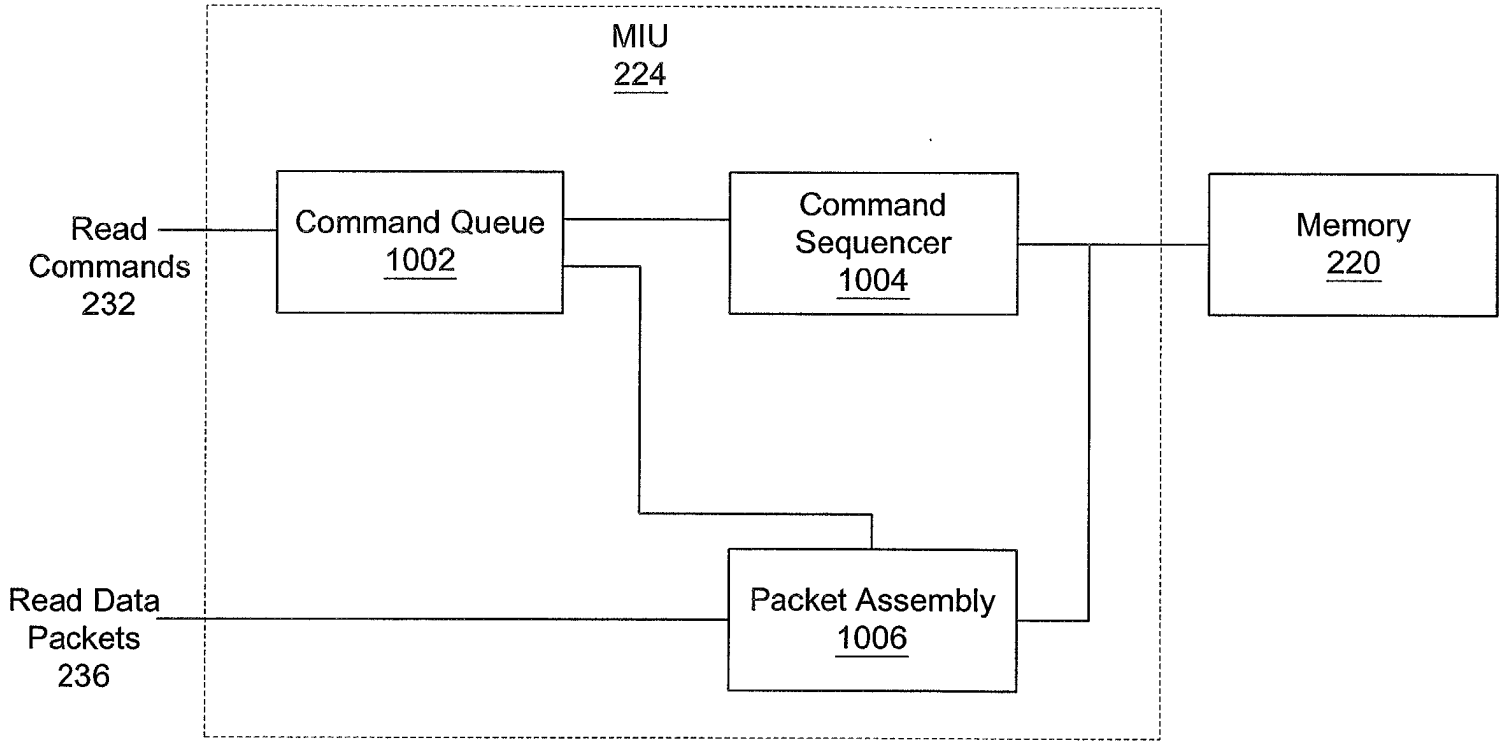

MIU
224
Read
Commands
232
Command Queue
1002
Command
Sequencer
1004
Memory
220
Read Data
Packets
236
Packet Assembly
1006

FIG. 10

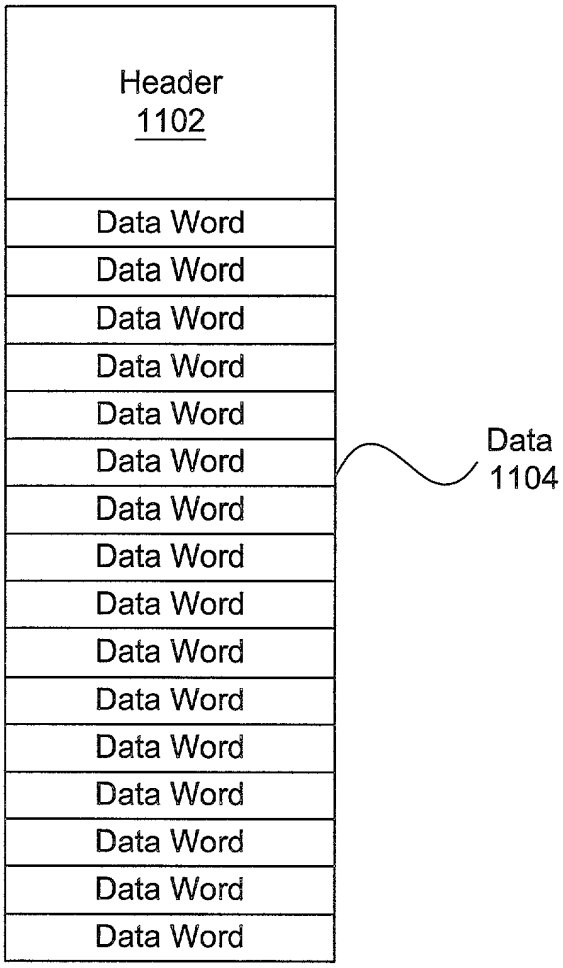

Header
1102
Data Word
Data Word
Data Word
Data Word
Data Word
Data Word
Data Word
Data Word
Data Word
Data Word
Data Word
Data Word
Data Word
Data Word
Data Word
Data Word
Data
1104

FIG. 11